DOCUMENT RESUME

ED 166 874 EC 113 365

AUTHOR	Emerson, Debby H.; And Others
TITLE	Project S.P.I.C.E.: Special Partnership in Career Education. Decision Making Teaching Module.
INSTITUTION	Volusia County Schools, Daytona Beach, Fla.
SPONS AGENCY	Office of Career Education (DHEW/OE), Washington, D.C.
BUREAU NO	554AH70701
PUB DATE	Sep 78
GRANT	G0077C0050
NOTE	57p.; For the final report, the implementation guide, and other modules, see EC 113 361-368
EDRS PRICE	MF-$0.83 HC-$3.50 Plus Postage.
DESCRIPTORS	Activity Units; *Career Awareness; *Career Education; *Decision Making Skills; *Educable Mentally Handicapped; Resource Materials; Secondary Education; Teaching Methods
IDENTIFIERS	*Project SPICE; *Special Partnership in Career Education

ABSTRACT

The decision making teaching module is one of a series of six modules prepared by Project SPICE (Special Partnership in Career Education) as a means of providing career awareness information to educable mentally handicapped students (ages 11-to-13 years). After an overview, a module profile is provided which charts the units, the activities in each unit, and the resources or materials needed for the unit. The units included in the module are "Thinking About Yourself", "Occupation Information", and "Selecting an Occupation". An eight-question assessment test is included for use prior to the unit activities. Appended are student resource materials with the following titles - "Putting Yourself in the Work Picture", "Thinking About Yourself", and "Getting Information About Occupations". (PHR)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED166874

PROJECT S.P.I.C.E.

SPECIAL PARTNERSHIP IN CAREER EDUCATION

DECISION MAKING

TEACHING MODULE

SEPTEMBER, 1978

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

THE SCHOOL BOARD OF VOLUSIA COUNTY, FLORIDA

Clinton M. Rouse

CAREER EDUCATION COORDINATOR and PROJECT S.P.I.C.E. DIRECTOR

Debby H. Emerson

PROJECT S.P.I.C.E. COORDINATOR

Frank S. Elliott

PROJECT S.P.I.C.E. RESOURCE TEACHER

Dr. John E. Bailey, III

PROJECT S.P.I.C.E. EVALUATOR

Dr. Marcella Kysilka

TECHNICAL ASSISTANT

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Clinton M. Rouse

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC) AND USERS OF THE ERIC SYSTEM."

FC013365

ACKNOWLEDGEMENTS

Many individuals contributed, either directly or indirectly, to the planning, development, implementation and evaluation of Project S.P.I.C.E. In a project of such large magnitude and short duration, it is seldom possible to acknowledge the efforts of all the persons who contributed to the project's success. Nonetheless, it is only appropriate to mention those whose efforts were essential to the project.

The administration and staff of the two pilot schools were extremely cooperative and helpful. Special appreciation is extended to Ms. Elinor Danglise, Ms. Linda Shelton and Mrs. Ruth Clifton, teachers of the project students, and to Mr. Henry M. Whites, Sr., Principal of Edith L. Starke Elementary School in DeLand and Mr. Robert A. Smith, Principal of George Marks Elementary School, also in DeLand.

Westside Elementary School in Daytona Beach was the comparison school for the project. Mr. John P. Vodenicker, Principal, and Mrs. Joyce Gettel, Mrs. Amye Hawthorne, Mrs. Vivian Watson, Mrs. Patricia Pensak and Mr. Ben Broxton, teachers of comparison students, made many valuable contributions to the project.

Throughout the project, Mr. Gerald W. Elbers of the U. S. Office of Career Education provided timely advice and assistance. He was particularly helpful to the project staff in refining the primary and subordinate objectives for the project, and in developing a strategy for reporting project results. Most importantly, perhaps, he believed in the project.

Special appreciation is also acknowledged to the State of Florida, Department of Education, Mr. Ralph D. Turlington, Commissioner, for granting permission to reprint selected pages from the Employability Skills Series. These materials were developed by the Career Education Center of Florida State University and published by the Division of Vocational Education, Joe D. Mills, Director.

And, finally, none of the foregoing could have been brought to fruition without the tireless efforts of Mrs. Susan Bradley who typed the original drafts of the Final Report, the Guide to Program Implementation and the six Teaching Modules, Mrs. Carole Keough, who typed the final drafts, and Ms. Susan Horvath, Career Education Specialist with Volusia County Schools, who spent many hours reading and editing the final copy. Also, a special thank you to Mrs. Barbara Renner, Staff Assistant for Volusia County Schools, who always found the answers to our most difficult problems.

Title VI of the Civil Rights Act of 1964 states: "No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance." Title IX of the Education Amendments of 1972, Public Law 92-318, states: "No person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving Federal financial assistance." Therefore, career education projects supported under Sections 402 and 406 of the Education Amendments of 1974, like every program or activity receiving financial assistance from the U.S. Department of Health, Education, and Welfare, must be operated in compliance with these laws.

The material in this publication was prepared pursuant to a grant from the Office of Education, U.S. Department of Health, Education, and Welfare. However, points of view or opinions expressed do not necessarily represent policies or positions of the Office of Education.

TABLE OF CONTENTS

INTRODUCTION i

OVERVIEW 1

Module Objective 1

Student Performance Objectives 1

Module Organization. 1

Module Utilization 2

Assessing Student Achievement. 2

MODULE PROFILE 4

LEARNING ACTIVITIES. 7

Unit 1 - Thinking About Yourself 7

Unit 2 - Occupation Information. 8

Unit 3 - Selecting An Occupation 9

ASSESSMENT INSTRUMENTS

Choosing An Occupation 10

Test Administration 11

APPENDIX -- STUDENT RESOURCE MATERIALS

PUTTING YOURSELF IN THE WORK PICTURE 1

THINKING ABOUT YOURSELF. 3

GETTING INFORMATION ABOUT OCCUPATIONS. 18

INTRODUCTION

Project S.P.I.C.E. (Special Partnership In Career Education) was conceived as a means of providing career awareness information to intermediate aged educable mentally handicapped students. Six modules have been developed for the Project S.P.I.C.E. curriculum. These six modules are designed to meet the following elements of the National Standard Career Education Model:

1. Career Awareness
2. Educational Awareness
3. Economic Awareness
4. Beginning Competency
5. Decision Making
6. Employability Skills
7. Self Awareness
8. Attitudes and Appreciations

The six modules are entitled:

1. Self Awareness (Standard 7)
2. Career/Educational Awareness (Standards 1, 2)
3. Decision Making (Standards 4, 5)
4. Economic Awareness (Standard 3)
5. Employability Skills (Standard 6)
6. Rights and Responsibilities (Standard 8)

Each module follows the same format: an overview and an activities section.

The overview includes: Module Objective; Student Performance Objectives; Module Organization; Module Utilization; Assessing Student Activities.

Following the overview are the activities for the module.

The directions in the overview inform you of any necessary, additional materials needed for the completion of the module. Also, estimated time spans are included to help you decide how the materials could be used in the classroom.

The modules are not intended to be strict rules for implementing a program, rather they are to be considered as guidelines and suggestions. You should feel free to alter, add, exclude, or ignore any of the activities included in the modules.

Materials for the Project S.P.I.C.E. Curriculum include:

1. Original materials designed by Project S.P.I.C.E. personnel and teachers.
2. Materials adapted from The Valuing Approach to Career Education, 3-5 Series, published by Education Achievement Corporation.
3. Materials from the State of Florida, Department of Education, Division of Vocational Education, Employability Skills Series.
4. Commercially produced materials from:
   Walt Disney Productions
   Society for Visual Education
   McDonald's Corporation

The career awareness program you establish for your students must meet their needs, just as Project S.P.I.C.E. met the needs of our students. Remember, Project S.P.I.C.E. is not a curriculum you introduce in place of an existing program, but more importantly, an integration into your on-going curriculum.

Welcome to Project S.P.I.C.E. We hope you find it as exciting and successful as we have.

OVERVIEW

MODULE OBJECTIVE

The student will demonstrate the ability to apply information and values to the process of making decisions in the selection of occupations and be able to demonstrate selected skills in the successful performance of each occupation.

STUDENT PERFORMANCE OBJECTIVES

The student will be able to:

1. List two kinds of information about self to use when deciding on an occupation.
2. List two ways to find out about his abilities, interests, work preferences and values.
3. List two major types of job information to collect before deciding on an occupation.
4. List two ways to find out about a specific occupation.
5. Select three occupations for skill development.
6. Name and demonstrate three skills required for each occupation selected.

MODULE ORGANIZATION

This module is designed to help the student become aware of the process of obtaining information about self and occupations in order to make decisions about entering the world of work. Throughout this learning period, students will be making tentative occupational choices so that they can begin assessing themselves in relation to information about these occupations. The module is comprised of three units involving seven learning activities.

Unit I: Students explore themselves, identifying personal traits and work preferences. They also discover how to find out information about themselves.

Unit II: Students explore means of obtaining information about various jobs and occupations.

Unit III: Students learn how to select an occupation and the consequences of their selections.

Units I and II should be implemented at the beginning of your program, while Unit III can be dealt with throughout the program.

During the course of this module, peer interaction, community career consultants and parental involvement should be intertwined with all other activities.

MODULE UTILIZATION

This module requires minimal preparation. All worksheets taken from Employability Skills Series, Choosing An Occupation, developed by the State of Florida, Department of Education, Division of Vocational Education, are provided in the module. You will need to reproduce the pages for your students.

ASSESSING STUDENT ACHIEVEMENT

Student achievement can be assessed in two ways: (A) by evaluating the quality of each student's participation in the module and (B) administering the test at the end of this module.

(A) Students participate in a variety of learning activities, all of which are intended to help students achieve one or more of the objectives. Thus, you may establish performance criteria for each activity and evaluate student achievement based on student's participation in the learning activities. Informal review tests are provided for Units I and II.

In particular you may want to assess student performance on activities in Unit III. The activities in this unit involve the demonstration and performance of making a decision concerning an occupation and developing skills for that occupation.

(B) Student attainment of some of the objectives for this module can be measured in part by the true-false test provided at the end of the module. Directions for test administration are included. An answer key, and a table which relates each item on the test to the student objective with which it is associated, is also included.

MODULE PROFILE

TOPIC	LEARNING ACTIVITIES	RESOURCES/MATERIALS
UNIT I: Thinking About Yourself		
ACTIVITY I: Personal Traits	Discuss with the students information concerning occupations they know about and how they might perform that occupation.	
	Introduce the concepts of abilities, interests, work preferences and values.	Pages 3-5 Choosing An Occupation Activity Page 6
	Review student responses on their "I Can..." Sheets and discuss how that information can be used in selecting an appropriate occupation.	Student "I Can..." Sheet
	Assist the students in comparing their abilities with those necessary in each occupation discussed.	Occupational profiles in Project S.P.I.C.E. Adds Color To Your Future Activity Book. Student written profiles Occupational Outlook Handbook
ACTIVITY II: Getting Information About Yourself	Introduce the concept of self-awareness and its' importance in making decisions about a future occupation.	

TOPIC	LEARNING ACTIVITIES	RESOURCES/MATERIALS
ACTIVITY II: (Cont'd)	Have the students read pages 7-11 to discover ways of finding out about their abilities, interests, work preferences and values. Students complete activity pages 12-14	Pages 7-11 in Choosing An Occupation Activity pages 12-14
ACTIVITY III: Identifying Your Work Preferences	Provide the students with additional insight into expanding their work preferences.	Activity Sheet pages 15-16 Self-Test page 17
UNIT II: Occupation Information ACTIVITY I: Types of Information	Introduce pages 18-20 in Choosing An Occupation. Through reading these pages the students will learn about the types of information they should have concerning various occupations. Pages 21-22 are activity pages for the students to complete.	Pages 18-20 in Choosing An Occupation. Activity pages 21-22 Self-Test page 23
ACTIVITY II: How to Get Occupational Information	Introduce pages 24-28 in Choosing An Occupation. These pages suggest a variety of ways to seek job information. Pages 29-33 available for the students to complete.	Pages 24-28 in Choosing An Occupation Activity Pages 29-33

MODULE PROFILE (CONT'D)

TOPIC	LEARNING ACTIVITIES	RESOURCES/MATERIALS
UNIT III: Selecting an Occupation ACTIVITY I: Selection	Ask the students to make a tentative occupational choice. Encourage the students to think about the criteria for choosing an occupation and encourage them to discuss their choice and why they selected it.	
ACTIVITY II: Skills	Once an occupation has been selected, have the student make a checklist of the basic skills necessary to enter that occupation. Focus attention on the basic skills and encourage the students to work on the skills on their checklist. Periodically review the checklists to evaluate individual progress.	Paper and pencil

LEARNING ACTIVITIES

Unit I

Thinking About Yourself

Student Performance Objective: The student will be able to:

1. List two kinds of information about self to use when deciding on an occupation.

2. List two ways to find out about his abilities, interests, work preferences and values.

Activity One - Personal Traits

Introduce this activity by discussing with the students information concerning occupations they know about. Ask students to name an occupation in which they are interested. Ask them to state what they know about the occupation and how they might perform that occupation.

Explain to the students that they will now begin studying about traits. By having the students read pages 3-6 in Choosing An Occupation, they will become familiar with the concepts of abilities, interests, work preferences and values. Use this information to review what the students have listed on their "I Can..." Sheets, asking questions such as "Do you have enough information about yourself to select that occupation?" "Do you feel that it is an appropriate occupation for you?" etc.

From the students' "I Can..." Sheets (see Self-Awareness Module, Unit II) assist the students in comparing their abilities with those necessary in each occupation discussed.

Activity Two - Getting Information About Yourself

The students are becoming aware of the need for more information about themselves before making a tentative decision about a future occupation. Introduce pages 7-14 in Choosing An Occupation. By reading these pages, students discover ways of finding out about their abilities, interests, work preferences and values. Pages 12-14 are activity pages for the students to complete.

Activity Three - Identifying Your Work Preferences

As students become aware of occupations in relation to their abilities, interests, work preferences and values, they can begin to make decisions as to their choice of several realistic occupational areas. To provide students with additional insight into expanding their work preferences, distribute Activity Sheets 15, 16. Students will become familiar with the process of critically viewing an occupation in terms of their work preferences.

Unit II

Occupation Information

Student Performance Objective: The student will be able to:

1. List two major types of job information to collect before deciding on an occupation.

2. List two ways to find out about a specific occupation.

Activity One - Types of Information

Students are now aware of how to obtain information about themselves and are ready to begin the process of making decisions concerning an occupation. Introduce to the students pages 18-23 in Choosing An Occupation. From these pages students will learn about the types of information they should have concerning various occupations. Also included are two activity pages for the students to complete.

Activity Two - How To Get Occupational Information

Throughout the program, the students are talking with community career consultants and obtaining information about various occupations. Community Career Consultants are an excellent source of information. However, during the course of your program you will not be able to expose the students to every occupation that is available. They must be able to know where they can obtain more comprehensive views of the world of work. Introduce the students to pages 24-33 in Choosing An Occupation. Within these pages, students will discover a variety of ways to obtain job information. One activity page is available for the students to complete.

Unit III

Selecting An Occupation

Student Performance Objective: The student will be able to:

1. Select three occupations for skill development.
2. Name and demonstrate three skills required for each occupation selected.

Activity One - Selection

The students have learned the basics of occupation selection. Ask the students to make a tentative occupational choice. Stress tentative choice. Encourage students to think about the criteria for choosing an occupation and ask them to discuss their tentative choice and why they selected it.

Activity Two - Skills

Once an occupation has been selected, students must develop skills that would be necessary to enter that occupation. By visiting and talking with a consultant, students can obtain a first-hand look at the necessary skills that can be learned now. This may involve an academic skill such as reading a paragraph, adding a column of numbers, following oral instructions, etc. The student should focus attention on the basic skills not the technical skills at this time. Have the students make a skills checklist, and encourage the students to work on the skills on their checklist. Periodically review their checklists and note progress made.

ASSESSMENT INSTRUMENTS

CHOOSING AN OCCUPATION

1. Your parent's level of education is an important factor that you should think about in choosing an occupation.

   TRUE FALSE

2. Your values are an important factor that you should think about in choosing an occupation.

   TRUE FALSE

3. Asking yourself questions is a good way to get information about your own interests and abilities.

   TRUE FALSE

4. Your horoscope is a good source of information about your interests and abilities.

   TRUE FALSE

5. Special licenses may be a requirement of a job.

   TRUE FALSE

6. Chances for advancement are part of the information that you should get on your future in the job.

   TRUE FALSE

7. Looking at product ads in a magazine is a good way to get information about job descriptions, requirements and prospects.

   TRUE FALSE

8. Watching television is a good way to get information about job descriptions, requirements and futures.

   TRUE FALSE

Test Administration

Pre-Test

By administering the true-false Choosing An Occupation test before using any activities in the module, you will have information concerning the student's present knowledge of the information necessary in choosing an occupation.

The test consists of eight (8) true-false statements. Students may read the statement and circle the correct answer. For those students unable to read the test, it may be administered orally, with the student circling the answer.

Post-Test

The post-test should be given at the conclusion of the module. The post-test is identical to the pre-test. Directions for administering the post-test are the same as for the pre-test.

Test Answer Key

Objective No.	Item No.	Correct Answer
1	1	F
1	2	T
2	3	T
2	4	F
3	5	T
3	6	T
4	7	F
4	8	F

CHOOSING AN OCCUPATION

Selected Pages from

CHOOSING AN OCCUPATION
PERSONAL FINANCES
GOOD WORK

Developed by:

Career Education Center
Florida State University

pursuant to a contract with the State of Florida, Department of Education, Division of Vocational Education.

Permission for reprinting of the selected pages has been obtained from:

State of Florida
Department of Education
Division of Vocational Education
Ralph D. Turlington, Commissioner

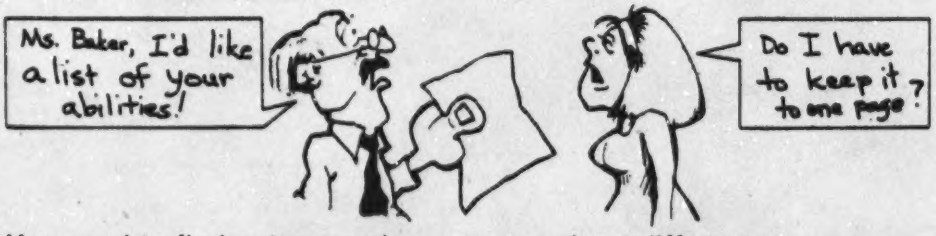
NOTE: Page numbers in parentheses correspond to pages in the original text material.

APPENDIX - STUDENT RESOURCE MATERIALS

Putting Yourself in the Work Picture

Your choice of an occupation is one of the biggest decisions that you'll ever make. Before deciding on one, it's important to think seriously about what occupations will fit in with your personal traits and work preferences.

You have your own special combination of abilities (skills) and aptitudes (natural talents), plus interests, work preferences, and values. These abilities and other personal traits can make you really successful and happy in some occupations. In other occupations, you may have to work much harder to learn the required skills or adjust to the working conditions. That's why it's so important to consider your personal traits when thinking about occupations.



You need to find out as much as you can about different occupations, too. Some occupations require the skills and interests you have; others don't. You may find some occupations exciting, while others may bore you. If you take the time to explore them, you'll find some occupations that match you in almost every way.

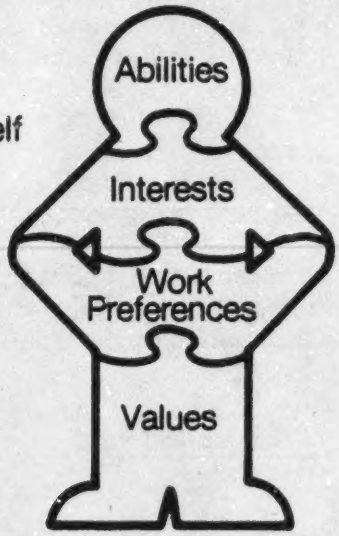
In learning more about the world of work, you'll hear the words *job, career,* and *occupation* used again and again. You may wonder whether there's any difference between an occupation, a career, and a job.

In this unit, the words *occupation* and *career* are used to mean the same thing. Both words cover the idea of the kind of work you do to earn your living. Occupations or careers can include many *jobs,* all of them in the same occupational area. For example, if you're a nurse, you may have a job as a nurse in the Army, then later at a doctor's office, and after that at a hospital. These separate nursing jobs are all within the area of your occupation, or career, as a nurse.

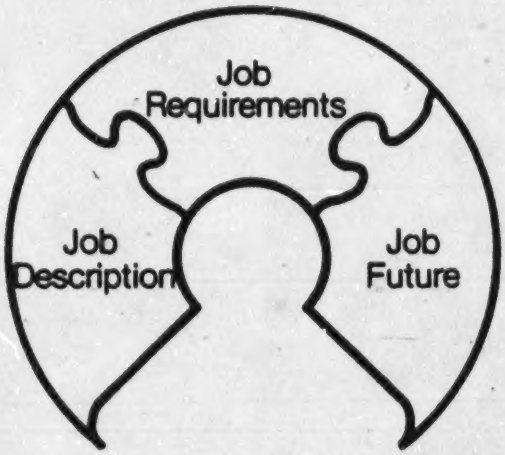
As you can see, deciding on an occupation doesn't mean choosing one job to do the rest of your life! When you choose an occupation, you select a general area or kind of work that you'd like to do. Each job within that occupation won't be exactly the same, but they'll all have something in common—such as the interests shared by most workers in the area, the need for certain skills or abilities, or the working conditions.

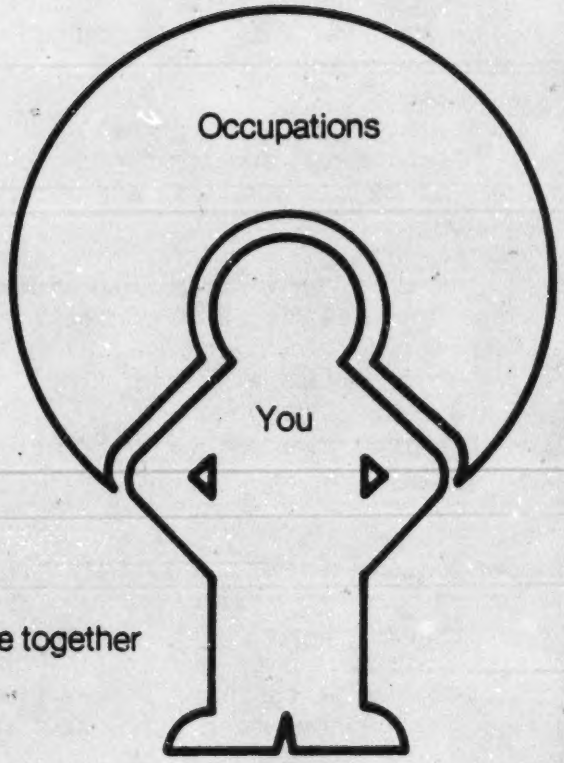
That's why you'll be thinking about yourself as you begin thinking about occupations. You'll be looking for matching traits in yourself and an occupation. This unit will show you:

How to find out information about yourself



How to find out information about occupations





How to put these together

Thinking about Yourself

Types of Information about Yourself

You're very special—you're the only person in the world like you. So, you are the most important thing to think about when you're choosing an occupation. Your special combination of interests, abilities, work preferences, and values provides the best source of information about you. These items can tell you what to look for in a career if you want to be happy and really do a good job.

It's important to find out these kinds of information about yourself *before* you choose an occupation. If you don't, you may end up in an occupation that doesn't suit you. Look at what these people have to say:

Kelly: "After being on the job for several months, I've found out that I really don't like working with a group. I'd rather work by myself. Too bad I didn't know that before I took the job."

Jim: "My dad always wanted me to be an architect, and so I took a lot of courses in design and drafting. What a bore! A few months ago I started all over again in ornamental horticulture, since I've always been interested in plants. My grades are better, and I don't even mind studying now."

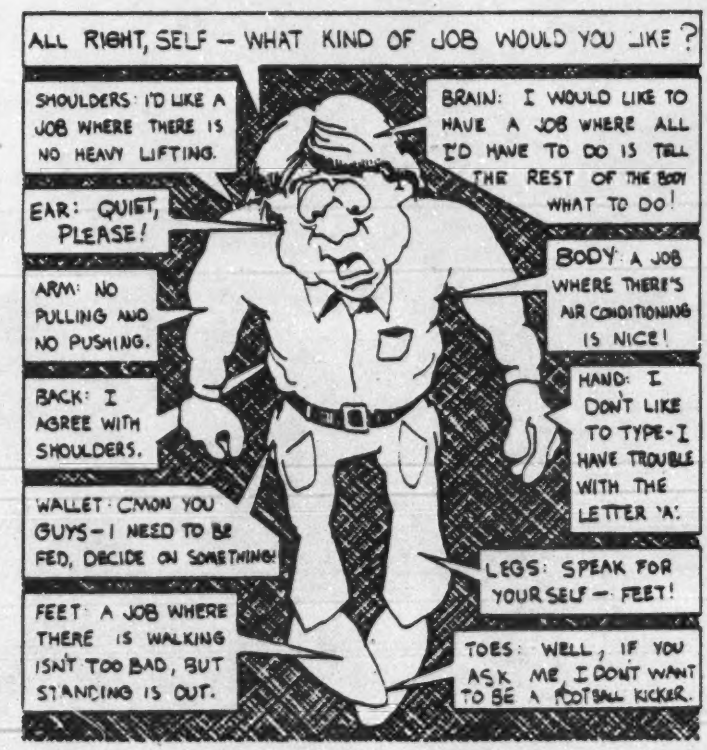
(10)

Alice: "I've been a secretary for three years. Lately I've begun to see that the thing I value most is being able to create something of my own, like a painting or a piece of pottery. Maybe I should have gone into art or design . . . ."

Doug: "I just failed the typing test at my first job interview. When I was having so much trouble in typing class, I should have realized I couldn't make a living as a typist."

Bill: "I wish I had taken a good look at myself before I rushed into the first job that came along!"

If Kelly, Jim, Alice, Doug, and Bill had spent some time getting to know themselves before they chose an occupation, they could have saved themselves a lot of dissatisfaction and unhappiness. What have their jobs taught them about themselves? Well, Kelly found out that she likes to work by herself, and not as part of a team or group. This is one of her *work preferences*. Jim learned that his real *interest* is horticulture, not architecture. Alice realized that she *values* being able to create something of her very own, like a painting, and Doug sees now that he has no *ability* in typing. Deciding on an occupation without knowing these kinds of things about yourself is like shopping for a pair of shoes without knowing the size you wear or the color you want.


ALL RIGHT, SELF — WHAT KIND OF JOB WOULD YOU LIKE?
SHOULDERS: I'D LIKE A JOB WHERE THERE IS NO HEAVY LIFTING.
BRAIN: I WOULD LIKE TO HAVE A JOB WHERE ALL I'D HAVE TO DO IS TELL THE REST OF THE BODY WHAT TO DO!
EAR: QUIET, PLEASE!
BODY: A JOB WHERE THERE'S AIR CONDITIONING IS NICE!
ARM: NO PULLING AND NO PUSHING.
HAND: I DON'T LIKE TO TYPE-I HAVE TROUBLE WITH THE LETTER 'A'.
BACK: I AGREE WITH SHOULDERS.
WALLET: C'MON YOU GUYS—I NEED TO BE FED, DECIDE ON SOMETHING!
LEGS: SPEAK FOR YOURSELF — FEET!
FEET: A JOB WHERE THERE IS WALKING ISN'T TOO BAD, BUT STANDING IS OUT.
TOES: WELL, IF YOU ASK ME, I DON'T WANT TO BE A FOOTBALL KICKER.

There are four kinds of information that you should know about yourself when you are getting ready to choose an occupation:

- your abilities
- your interests
- your work preferences
- your values.

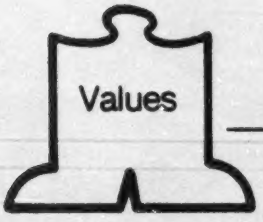
When you put these traits or characteristics together, they form a picture of you as a worker. You'll be putting together a picture of yourself in the first part of this booklet.

These four kinds of information can help you decide what kind of work you'll be good at and enjoy most.

Your *abilities* are the things you do well. Can you fix things, sew, play a musical instrument, type, or cook? In what subjects do you make good grades—math, English, art, business, physical education?

Your *interests* are the things you like and enjoy doing. What are you interested in? What are your hobbies? Do you enjoy music or science, meeting people, selling things? Are you happiest when working outdoors?

Your *work preferences* are the feelings you have about the kinds of activities you do on the job and the conditions under which you work. Do you like to work alone or with other people? Would you rather work with things or with ideas? Do you like to be the boss, or carry out someone else's directions? Do you prefer a set routine, or a challenging job with new problems to solve almost every day?



Your *values* are the things that are important to you. Would you prefer a job that pays a lot of money, or a job that pays less but is more secure? What other things are important to you—responsibility, independence, power, the good opinions of others? Or do you value a job in which you can be creative, help others, or add to the world's knowledge?

When you put these things together they form a picture of you as a person in the world of work.

Activity:

Identifying Personal Traits

1 List the four kinds of information about yourself that you should think about before choosing an occupation. Then define (describe) each one in your own words.

	Kind of Information	Definition
a.	_____	_____
b.	_____	_____
c.	_____	_____
d.	_____	_____

2 Read each sentence and decide whether it states a person's interests (I), work preferences (P), values (V), or abilities (A). Then write the letter that describes the statement in the blank in front of each line.

___ I like to work alone.

___ I like to work with plants.

___ I am very good with numbers.

___ I like to write stories.

___ I think the most important thing in life is having lots of money.

___ I can type 60 words per minute.

___ I can play the piano.

___ I like sports.

___ I think having lots of friends is important.

___ I like to play the piano.

___ I like to work with tools.

___ I would rather have a low-paying job where I was certain I wouldn't be laid off than a high-paying job that might last only a short time.

___ I would rather take orders from someone else than have to make a lot of decisions myself.

___ I made straight A's in shorthand.

How to Find Out about Yourself

Right now you're probably saying to yourself, "Okay. Everybody has different abilities, interests, work preferences, and values. But how do I find out these things about myself?"

Why not start by asking yourself? You know yourself better than anyone else does. Then check with people who know you well and ask for their opinions. You can also get some good information about your abilities and interests by looking at your school records and test results. The information you get from these sources can help you form a more complete picture of yourself.

Be careful, though, not to accept everything you find out about yourself without question. Some people will tell you what they think you want to hear, or what they wish were true. Grades and test scores sometimes tell only half the story—you may have scored poorly on an important test because you were nervous or sick, or made poor grades one year in school because you didn't know then that you needed glasses.

Don't make excuses for yourself, however—you know your shortcomings. But remember that your career choice should be based on *all* the information you can get about yourself.

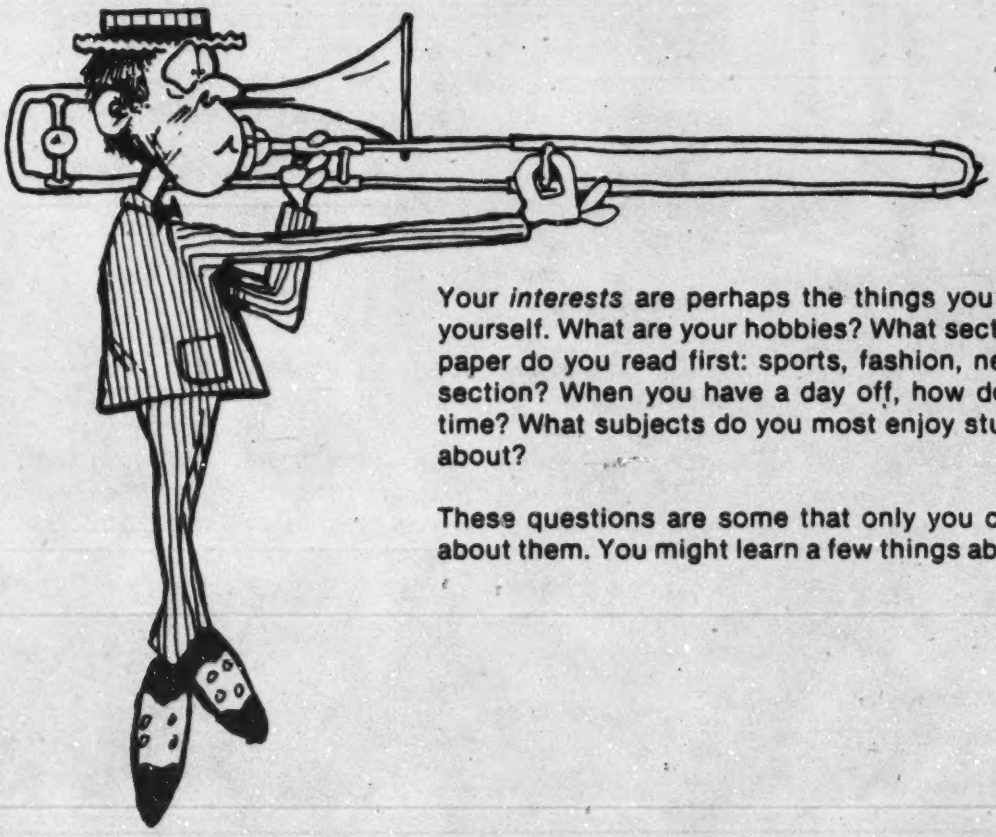
Ask Yourself

You're the expert when it comes to you. You know more about yourself than anyone else does, but you may know yourself so well that you take your interests, skills, abilities, and other personal traits for granted. If playing the guitar, writing, or swimming is easy for you, you may not realize that you have a talent that other people work hard to achieve (master). Taking the time to think about your likes and dislikes, what you do well and what you don't, can pay off. The information you find out will be useful in helping you decide on a career.

A good way to begin is with a self-inventory—a written description of your abilities, interests, work preferences, and values.

Think about the things you've done in the past that you've especially liked doing or really disliked. Ask yourself, "What made these good or bad experiences for me?" Was the task too difficult, or so easy that it bored you? In school, what subjects have you made good grades in? Now you're talking about *abilities.* Did you enjoy a particular project because you were working with other people as part of a team, or because you were in charge and made the decisions? Are you happiest when working alone, or with a particular group, like children, adults, or the handicapped? These are examples of *work preferences.*

To find out more about your *values,* think back over some of the decisions you've made. Did you turn down a chance to make some money so you could play softball or go to a concert? Did you volunteer to help at a community center during the holidays instead of getting a part-time job?



Your *interests* are perhaps the things you know best about yourself. What are your hobbies? What section of the Sunday paper do you read first: sports, fashion, news, or the movie section? When you have a day off, how do you spend your time? What subjects do you most enjoy studying or learning about?

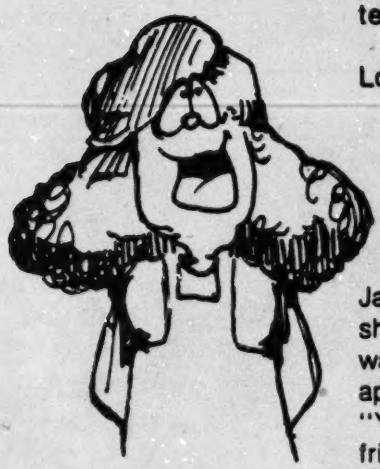
These questions are some that only you can answer. Think about them. You might learn a few things about yourself.

Ask People Who Know You Well

You know things about yourself that no one else knows. But other people may have noticed things about you that you take for granted or aren't even aware of. Other people can be a very good source of information because they see you differently than you see yourself. Often their views can complete the picture you have of yourself—like filling in the missing pieces of a puzzle.

Who should you ask for information about yourself? People like parents, teachers, friends, and employers *who know you well* can give you a worthwhile opinion. They may be able to tell you some things even you don't know.

Look at the following examples.



Janet was never a particularly shy girl, but there were times when she felt nervous and a bit uncomfortable meeting people. So she was quite surprised when one of her teachers encouraged her to apply for a job with the airlines. "Janet," her teacher had said, "You have just the personality for jobs serving the public. Your friendliness really puts people at ease." After asking a few other people, Janet found out that her nervousness was something only she could see—other people, like her teacher, saw her as a friendly and confident person.

Bob thought he wanted to be a pharmacist and work in the family drug store. All through school he worked hard to make good grades in his science courses. Bob never considered being an auto mechanic, until one Saturday afternoon when his best friend said, "If you're so interested in pharmacy, how come you spend all your spare time tinkering with old car engines and reading Auto Mechanics Weekly?"

Janet's teacher and Bob's friend were able to tell them useful information about themselves that neither had realized before. You'll notice, however, that Janet didn't accept what her teacher said until she got a second opinion. If Bob is smart, he'll remember that interests are only part of the picture. As you'll read later, Bob's values, abilities, and work preferences could make pharmacy a better career choice for him, in spite of his interest in cars.

The thing to remember as you begin getting information about yourself is to use several different sources of information. For example, don't be convinced that you have no ability in a certain area on the basis of just one fact or opinion. You may feel that you are not very good at math because your grades in algebra are low. Your shop teacher, however, may see you as having good numerical ability as he watches you work with the math problems in mechanical drawing. People like this, who know you well and see what you are capable of, can give you an opinion that means something. They may see things about you that you yourself are not able to see. Try to use what other people tell you to get a more complete picture of your abilities, and perhaps even your values and work preferences. But use information from others as only part of the picture. The person who knows you best is probably *you!*

Look at Your Grades and School Records

Where else can you get information about yourself? Another good place to look is your school records; they can give you a good idea of your strong and weak areas. What are your favorite subjects and why do you like them? Are those the subjects you make your best grades in? Notice the general direction your grades have taken in different subjects over the past few years. If your grades in math have been mostly A's and B's, then you probably have an aptitude (natural talent) for math.

One word of caution: Don't let your grades alone limit your choice of careers. Although grades show how well you've done in a course, they don't always show what you are capable of doing. Hard work, new and good ideas, and real interest can make the difference in whether you become good at something, or just fair. Be realistic, though. Your grades and your school records ought to give you a good idea of where your aptitudes and abilities lie.

Take Some Tests

All through school you've been taking tests: tests in the classroom (such as quizzes, midterms, and final exams), achievement tests (like the Florida eighth grade test), and college placement tests. You can use the results of tests like these to give you an idea of what your aptitudes and abilities are.

There are other kinds of tests you can take too, called *interest tests*, that will give you information to use in deciding on a career. These tests help you figure out your interests and compare them to the interests of people who are actually employed in a particular line of work. For instance, if you like helping people, you may want to go into teaching or nursing. If you're interested in taking one of these tests, see your guidance counselor or visit your local Florida State Employment Service. Many of these tests are given free of charge.

Remember that tests, like other people's opinions, are only one source of information. They should only be used to help you find out more about yourself. Test results cannot tell you what career to choose. But, when used together with other sources of information, they can help you get a more complete picture of your abilities, interests, values, and work preferences.

You can't choose a career until you know who you are and what you have to work with. So use all the sources of information that are available:

- yourself
- other people who know you well
- your grades and school records
- tests.

Activity:

Getting Information about Yourself

1 What are four sources of information that you can use to find out information about yourself?

a. _____

b. _____

c. _____

d. _____

2 Robert plans to go to engineering school after he graduates from high school, and so he has been taking math and science courses. His grades in these courses have never been above C. On the other hand, he hasn't made below an A in English and French in two years. If Robert asked you for advice about what his grades mean and what he should do about a career, what would you say?

_____

_____

_____

3 Melinda is taking a drawing course through a correspondence school. She receives her assignments through the mail, does them, and sends them back. She has never met her instructor. One day she gets some drawings back from the school marked, "YOU HAVE ABSOLUTELY NO TALENT FOR ART!" Melinda doesn't believe it. Her parents and her friends have told her several times that her drawings are good, and she thinks they are, too. When her friend Jean asks her why she isn't more upset, Melinda answers, "It's important to listen to what other people say about your talents—but it's just as important that the person be someone who knows you well and someone you trust to give you an honest opinion. That correspondence school instructor has only seen two of my drawings, and I've never seen anything she has done. How can I rely on that one opinion?" Do you think Melinda was right? Why?

_____

_____

_____

(21)

Activity:

Rating Your Abilities

Everyone has different abilities. Knowing what you do best will help you figure out which occupations you may want to explore.

1 This chart shows some of the many kinds of abilities. For each one listed, put a check (✓) in the box that you think best describes your ability level. Then look at where your checks are. They show what *you* think are your strongest abilities. (Remember, you can also get information about your abilities from tests, grades, and other people.)

Verbal

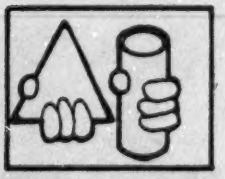
Able to understand and use words and ideas in speaking and writing

Numerical

Able to work with numbers accurately and quickly

Reasoning

Able to learn, to understand, and to solve problems



Perception

Able to see differences or similarities in the things around you

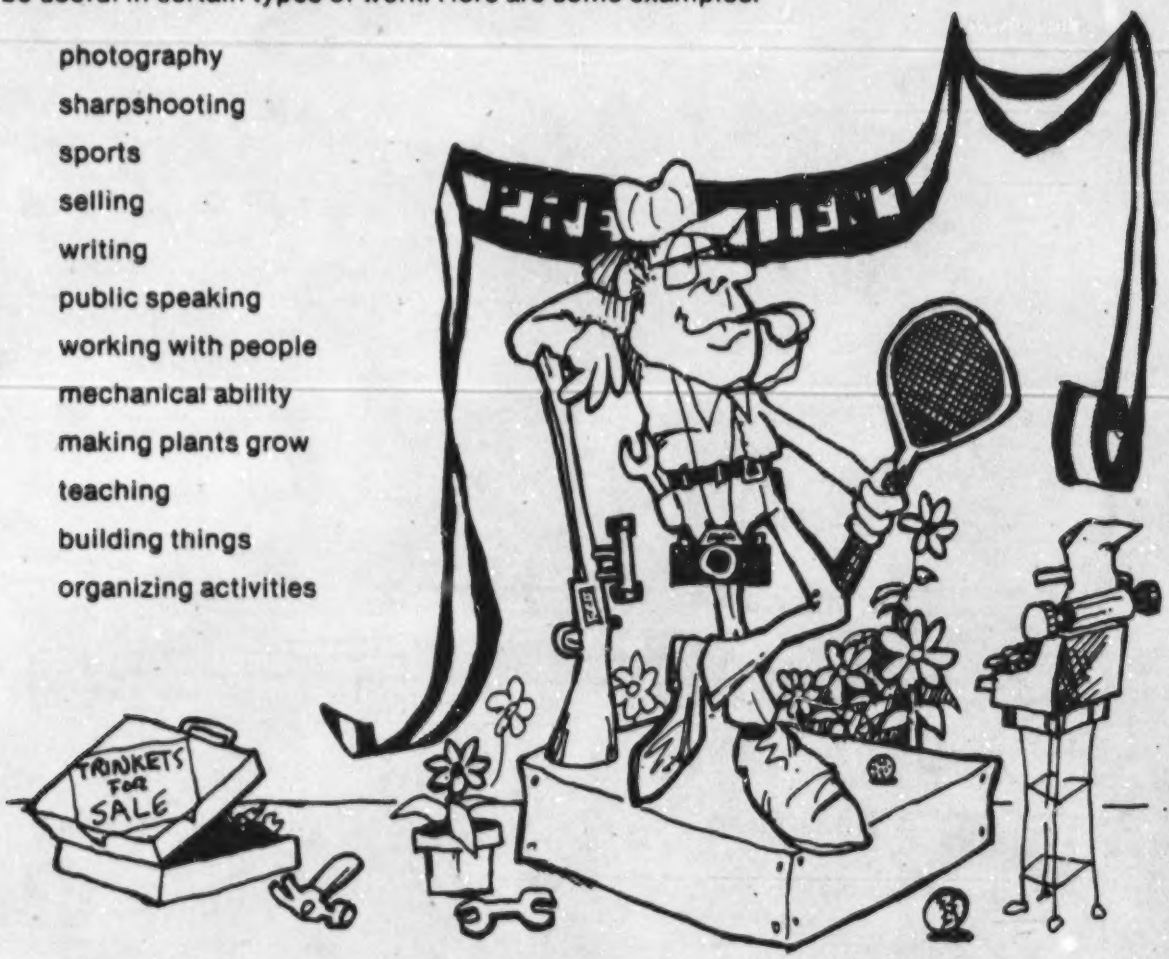
Coordination

Able to use feet, hands, and fingers easily and skillfully

	Very High	High	Average	Low	Very Low
Verbal	☐	☐	☐	☐	☐
Numerical	☐	☐	☐	☐	☐
Reasoning	☐	☐	☐	☐	☐
Perception	☐	☐	☐	☐	☐
Coordination	☐	☐	☐	☐	☐

2 You probably have some skills and abilities not described in the chart. What are they? What do you do well? Think about your hobbies and activities away from school, as well as your school work. Some of the skills you've developed there could be useful in certain types of work. Here are some examples:

photography
sharpshooting
sports
selling
writing
public speaking
working with people
mechanical ability
making plants grow
teaching
building things
organizing activities



Make a list of some of the things *you* do well.

_____

_____

_____

_____

Activity:
Identifying Your Work Preferences

1 One way to think about occupations is in terms of whether a person spends most of his/her time working with people, things, or information. Mechanics and construction workers, for example, spend most of their time working with *things* and equipment. In other jobs, such as nursing or counseling, most of the workday is spent working with *people.* Mathematicians, law clerks, bookkeepers, computer programmers, and scientists work mainly with *information*—facts, figures, and ideas.

Of course, most jobs involve all three—people, things, and information—but in different amounts. With which of these would you prefer to spend *most* of your time? Put *1* by the one you'd like most, and a *3* by the one you'd like least.

____ working with people

____ working with things

____ working with information (facts, figures, ideas)

2 Choose the work situation you prefer in each of the pairs below by placing a check (✓) in the correct boxes.

- ☐ doing something different every day
- ☐ doing the same thing every day

- ☐ taking orders from another person
- ☐ giving directions to others

- ☐ working alone most of the time
- ☐ working with other people

3 Place a check (✓) next to any of the following working conditions that you would *dislike very much*—so much that you would probably turn down any job that involved that type of working condition.

- ☐ heavy physical work
- ☐ sitting for long periods
- ☐ standing for long periods
- ☐ dangerous work
- ☐ extreme heat or extreme cold
- ☐ having to work overtime, nights, or weekends
- ☐ high pressure work; making important decisions that affect many people
- ☐ having to wear a uniform
- ☐ getting very dirty or greasy
- ☐ all outside work
- ☐ all inside work
- ☐ routine, unchanging work (doing the same thing over and over)
- ☐ loud noise or vibration
- ☐ traveling most of the time
- ☐ working in a large city
- ☐ working out in the country
- ☐ working alone most of the time
- ☐ work in which deadlines are always a part of the job
- ☐ other (Write any other working condition that would bother you a lot.) _____

Activity:
Rating Your Job Values

What is most important to *you* in a job? Since most people work to earn a living, the pay is usually important. But a career should give you more than money: it should fulfill (meet) some of your personal needs or values. The job values listed below are ones many people find important. Look them over, and add any other ones you think of. Then rate the values on the list below by putting a check (✓) in the column that shows how you feel about them.

	Not important to me	Important to me	Very important to me
Job security. Do I want a job which is steady—one that I can count on?	☐	☐	☐
Fame. Do I care a lot about whether people know about me and my work?	☐	☐	☐
Service to others. Do I want a job in which I can help other people?	☐	☐	☐
Money. Does the amount of money I earn mean a lot to me?	☐	☐	☐
Personal satisfaction. Do I want a job that will give me a feeling of doing something worthwhile?	☐	☐	☐
Respect. Do I want people to admire and look up to me?	☐	☐	☐
Challenge. Do I like solving new and difficult problems? Do I like to work hard, to the limit of my ability?	☐	☐	☐
Creativity. Do I want to do work that depends on my own new ideas?	☐	☐	☐
Interest in knowledge. Do I want a job in which I will discover new things?	☐	☐	☐
Enjoyment. Does my work have to be fun?	☐	☐	☐
Time. How important is it to me to have my evenings and weekends free—no working overtime?	☐	☐	☐
Power. Do I want a job where I can make the decisions and be the boss?	☐	☐	☐
(If there is something else that would be very important to you in a job, write it here.)	☐	☐	☑

_____

Name _____

Date _____

Self-Test

Objective 1

Name four kinds of information about yourself that you should use in choosing an occupation.

1 _____

2 _____

3 _____

4 _____

Objective 2

List three ways to find out information about yourself.

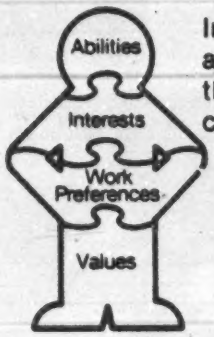
1 _____

2 _____

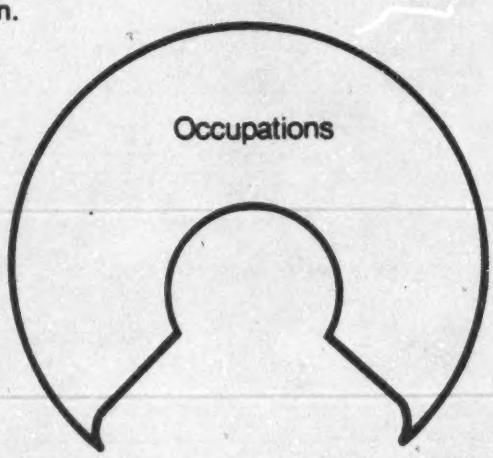
3 _____

Getting Information about Occupations

To make a wise decision about anything, you need to know what your choices are. When making a decision about something as important as your future occupation, you'll want to spend time exploring the many different careers that are open to you.



In the first part of this booklet, you learned about the kinds of information *about yourself* that you need to help you choose an occupation.

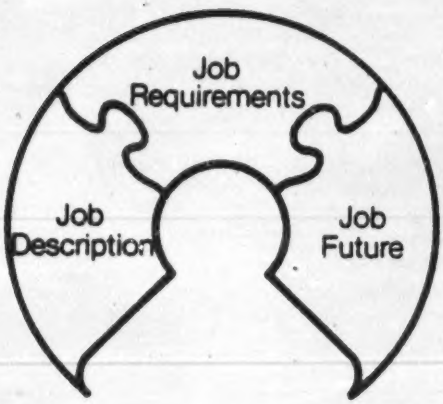


In this section, you'll find out what kinds of information you should get *about the occupations* themselves.

Types of Information about Occupations

You really don't know much about an occupation until you know the description of the job, the requirements for the job, and the job future.

The job requirements are those things that you must have in order to get a job, such as a certain amount of education or training, special abilities, work experience, or special licensing. Special abilities are the skills needed for a particular occupation—like being able to read music to be a music teacher, or knowing sign language to work with the deaf. Special licensing or certification is required to work as a registered nurse, a licensed plumber, an airplane pilot, or a truck driver.



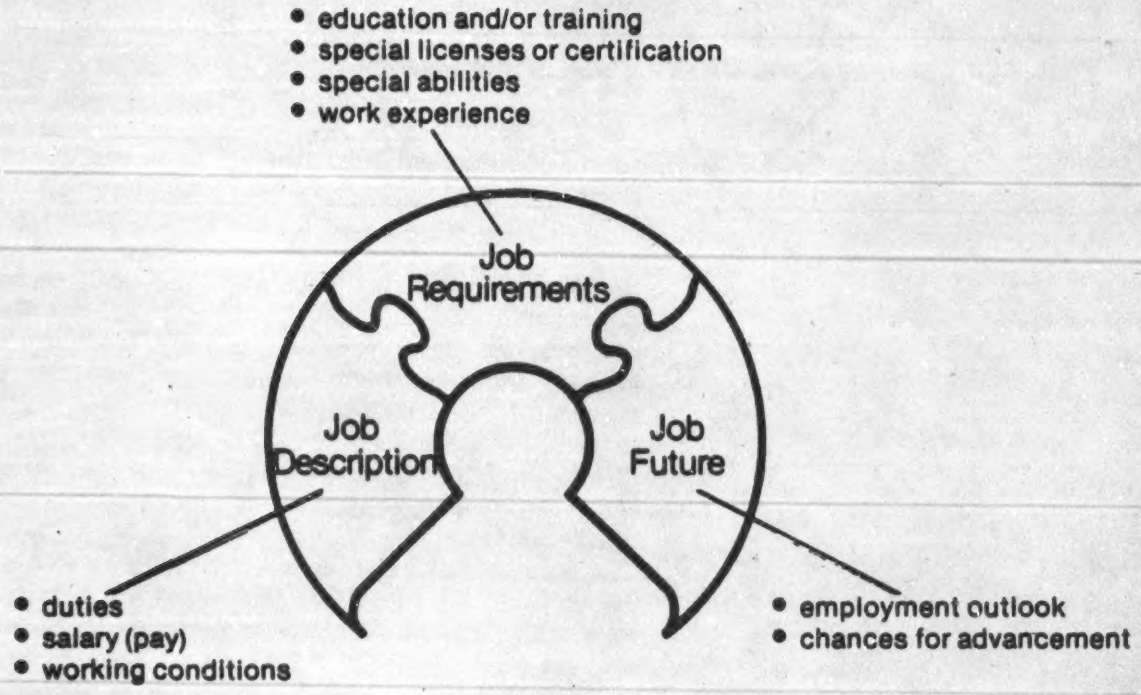
Job requirements like these are important information to look for when you are exploring an occupation. For instance, to be an accountant you need a *college degree* and *high numerical ability.* As a beginning auto mechanic you may be able to learn the trade on the job, but you should have *mechanical ability.* Mechanics are also required to have a *driver's license* and their own *hand tools.* In addition, work *experience* is required for many jobs.

The job description tells you about the occupation itself: what the duties are, how much it pays, and what the working conditions are like. For example, depending on the particular field of accounting, an accountant's *duties* may include auditing books, preparing tax forms, or providing information to help executives make business decisions. Experienced accountants *earned* between $17,000 and $29,000 a year in 1974. The *working conditions* are usually those of most office jobs—indoors, working mainly with numbers and information.

The auto mechanic's *duties* usually include performing maintenance; locating the cause of mechanical problems; using test equipment, tools, and manuals; and making repairs. *Earnings* for a skilled mechanic working for a dealer averaged about $7 an hour in 1974. *Working conditions* often include long hours, handling greasy and dirty parts, and lifting heavy objects.

The job future includes the employment outlook for an occupation and the chances for advancement within the occupation. The *employment outlook* tells you whether the career you want to prepare for will still need employees when you finish your education and training. For example, employment in space program occupations went down from 1.4 million workers in 1963 to 750,000 workers in 1974. The employment outlook is better for some occupations than others; for example, auto mechanics and accountants will continue to be in demand.

The *chances for advancement* are the opportunities for moving up in a job. Experienced auto mechanics with leadership ability can work up to service manager or shop manager. Accountants have many chances for advancement to supervisory or executive positions. Chances for advancement are not good in all occupations, however. For example, power truck operators have limited opportunities for advancement, although a few operators may become supervisors.



Types of Information about Occupations

Activity:
Identifying Types of Job Information

1

Below are some words that you will come across as you explore occupations, but the letters are all scrambled. Try your luck at unscrambling them. Use the list below for clues.

Types of Information	Examples
Job Requirements	*education* and/or *training* special *licenses* or certification special *abilities* work *experience*
Job Description	*duties* salary (*pay*) *working conditions*
Job Future	employment *outlook* chances for *advancement*

KOOLTOU ☐☐☐☐☐☐☐

NIRAGNIT ☐☐☐☐☐☐☐☐

CADEUNIOT ☐☐☐☐☐☐☐☐☐

CIEEPRXNEE ☐☐☐☐☐☐☐☐☐☐

ESTUID ☐☐☐☐☐☐

ILCESNSE ☐☐☐☐☐☐☐☐

YPA ☐☐☐

NEVAMDACNET ☐☐☐☐☐☐☐☐☐☐☐

KGINROW NOSDIITOCN ☐☐☐☐☐☐☐ ☐☐☐☐☐☐☐☐☐☐

ISILTBIAE ☐☐☐☐☐☐☐☐☐

2

Identify each of the following examples of job information by writing in the type of information it is—job *requirement*, job *description*, or job *future*. The first one is answered for you.

Type of Job Information	Example
requirement	ability *(able to type 35 words per minute)*
_____	chances for advancement *(advance to manager in two years)*
_____	working conditions *(work outdoors)*
_____	education and/or training *(high school diploma required)*
_____	pay *(earn $9,700-$11,500 a year)*
_____	job outlook *(need for workers in this career will decrease)*
_____	special licenses or certification *(pilot's license required)*
_____	work experience *(two year's work experience needed)*

(37)

Name _____

Date _____

Self-Test

Objective 3

List three major types of job information to collect before you decide on an occupation, and give an example of each type.

Type of Information	Example
_____	_____
_____	_____
_____	_____

Turn the page to check your answers.

How to Get Information about Occupations

Just as there are many ways to find out more about yourself, there are many good sources of information about occupations. Some sources, such as books and magazines, provide more information than others. Workers in an occupation can tell you things about their jobs that you may not be able to find out anywhere else. Materials distributed by state or local groups and agencies are good sources of up-to-date information about jobs in your area. As you can see, you'll get more complete information about an occupation if you use as many different sources as possible. Here are some good ways to find out about an occupation.

Talk with people who work in that occupation. If you don't know anyone to talk to, maybe your parents or friends do. Ask them to introduce you.

Ask your guidance counselor or occupational specialist for information about different occupations.

Observe workers on the job. This is a great way to find out what the work is really like in a particular occupation.

Think about your own work experience. What kinds of jobs have the people you've worked with done? For example, if you work as a part-time receptionist in a doctor's office, you've seen some of the duties that doctors and nurses perform.

Interview employers who hire workers in the occupations that you are interested in. They are a good source of first-hand information.

(43)

Read about occupations. Ask the librarian in your school or city library to show you some books and magazines about different occupations. For example, *Worklife* and the *Occupational Outlook Quarterly* are two magazines that have articles about occupations.

Talk to members and officers of different trade unions.

Write to professional groups for information about particular occupations. For example, if you are interested in becoming a barber, write to the National Association of Barber Schools. There's a list of helpful addresses on page 102.

Reading about Occupations

Books and magazines are excellent sources of occupational information. Most schools and public libraries have reference materials in which you can look up different occupations. If your instructor doesn't have copies of these, ask your school librarian, guidance counselor, or occupational specialist to help you get copies. Here are three printed sources of occupational information that can be found in many schools:

- *Occupational Outlook Handbook*
- *Dictionary of Occupational Titles*
- *Project VIEW.*

Contained in these materials are the job description, the job requirements, and the job future of almost any career you want to learn about. These references are handy and easy to use, with all the information you need in one place. In addition to occupational information, each one contains a list of other sources that you can use, or write for, to get more information about a particular occupation.

The *Dictionary of Occupational Titles* and *Occupational Outlook Handbook* are books; *Project VIEW* is a set of cards you use with a viewer. The occupational specialist and school librarian can help you get copies of these materials and show you how to use them. If your school does not have these references, ask if they have other sources of information about occupations that you can use. Here's what these sources contain.

The *Dictionary of Occupational Titles* is printed by U.S. Department of Labor. It describes about 35,000 jobs, using a code number to tell about each job in terms of type of work performed, worker requirements, training required, physical demands, and working conditions. Your school library probably has a copy.

The *Occupational Outlook Handbook* is shown in the samples on page 49 and on page 82. This book is available in many school libraries, too. The student in the following activity used it to get information about drafting as an occupation. You'll be using the *Occupational Outlook Handbook* to do the activity on the next few pages.

The letters in *Project VIEW* stand for *V*ital *I*nformation for *E*ducation and *W*ork. It is made up of several decks of cards that have been photographed on film. The print on the film is very small and can only be read through a viewer called a *reader.* Each card contains information about an occupation,

including a job description, job requirements, and required education or training. Because these cards are updated on a regular basis, they provide current information about occupations. Ask your school librarian or occupational specialist if your school has a set.

Some schools have *shadowing* programs, which provide students an opportunity for observing workers on the job. More than a class field trip to a job site, shadowing allows a selected student to spend extended time—sometimes as much as a week or more—with workers employed in an occupation that the student is interested in. Students participating in these programs can see firsthand the duties performed, the working conditions, and the daily activities of workers in a chosen career.

HARRY, I'M WORRIED ABOUT ELMO. ALL HE DOES IS BUILD WITH HIS LINK-PEGS.
ELMO, M'BOY, YOU HAVE TO QUIT PLAYING AND START THINKING ABOUT YOUR FUTURE.
I GUESS DAD IS RIGHT. BUT I REALLY DON'T KNOW WHAT TO DO. MY HEART IS REALLY INTO BUILDING THINGS AND...
WHY DON'T YOU FOLLOW IN MY FOOTSTEPS AND BE A DOCTOR?
YOUR SHOES ARE TOO BIG FOR ME.
HEY! I'VE GOT IT! I'LL BE AN ARCHITECT AND DO SOMETHING I ENJOY!
AND 10 YEARS LATER
ELMO BRIDGE

(47)

Activity:

Using the Occupational Outlook Handbook

Drew Lyons likes to draw and thinks he might be interested in becoming a drafter. He got a copy of the *Occupational Outlook Handbook* and looked up *drafter* in the index in the back. Then he read the article about drafters and used the information he found to fill out the Exploring Occupations Worksheet on page 51. (This worksheet is simply a form on which you can conveniently write the information you find about an occupation.)

In this activity, you'll see how Drew used the *Occupational Outlook Handbook* to fill out the worksheet. You'll need to know how so that you can fill out your own Exploring Occupations Worksheet on two other occupations later in this booklet.

Here's what to do.

1

Read the information about drafters on these pages. (They're taken from the *Occupational Outlook Handbook*.) Each of the circled numbers (① to ⑩) on these pages is written next to certain kinds of important information about drafters.

2

Read the sample Exploring Occupations Worksheet that Drew filled out on page 51.

3

Write the circled number from the *Occupational Outlook Handbook* next to the area on the Exploring Occupations Worksheet where Drew wrote that information. (① has already been written for you next to "Title of occupation to be explored.")

The circled numbers show the information that Drew used to fill out his worksheet. Write the circled number on the Exploring Occupations Worksheet wnere Drew wrote the information.

① **DRAFTERS**

(D.O.T. 001.281, 002.281, 003.281, 005.281, 007.281, 010.281, 014.281, and 017.)

Nature of the Work

When making a space capsule, television set, building, or bridge, workers follow drawings that show the exact dimensions and specifications of the entire object and each of its parts. Workers who draw these plans are drafters.

② Drafters prepare detailed drawings based on rough sketches, specifications, and calulations made by engineers, architects, and designers. They also calculate the strength, quality, quantity, and cost of materials. Final drawings contain a detailed view of the object as well as specifications for materials to be used, procedures followed, and other information to carry out the job.

In preparing drawings, drafters use compasses, dividers, protractors, triangles, and machines that combine the functions of several devices. They also use engineering handbooks, tables, and slide rules to help solve technical problems.

Drafters are classified according to the work they do or their level of responsibility. *Senior drafters* translate an engineer's or architect's preliminary plans into design "layouts" (scale drawings of the object to be built). *Detailers* draw each part shown on the layout, and give dimensions, materials, and other information to make the detailed drawing clear and complete. *Checkers* carefully examine drawings for errors in computing or recording dimensions and specifications. Under the supervision of drafters, *tracers* make minor corrections and trace drawings for reproduction on paper or plastic film.

From: U.S. Department of Labor. Bureau of Labor Statistics. *Occupational Outlook Handbook*, 1976-77 Edition. Bulletin 1875.

(49)

Drafters may specialize in a particular field of work, such as mechanical, electrical, electronic, aeronautical, structural, or architectural drafting.

Places of Employment

About 313,000 persons—8 percent of them women—worked as drafters in 1974. More than 9 out of 10 drafters worked in private industry, with engineering and architectural firms employing almost 30 percent of all drafters. Other major employers included the fabricated metals, electrical equipment, and construction industries.

About 20,000 drafters worked for Federal, State, and local governments in 1974. Most drafters in the Federal Government worked for the Defense Department; those in State and local governments were mainly in highway and public works departments. Another several thousand drafters worked for colleges and universities and nonprofit organizations.

Training, Other Qualifications, and Advancement

Persons interested in becoming drafters can acquire the necessary training in technical institutes, junior and community colleges, extension divisions of universities, and vocational and technical high schools. It is also possible to qualify through on-the-job training programs combined with part-time schooling or 3- to 4-year apprenticeship programs.

Training for a career in drafting, whether in a high school or post-high school program, should include courses in mathematics, physical sciences, mechanical drawing, and drafting. Shop practices and shop skills also are helpful since many higher level drafting jobs require knowledge of manufacturing or construction methods. Many technical schools offer courses in structural design, strength of materials, and metal technology.

Those planning careers in drafting should be able to do detailed work requiring a high degree of accuracy; have good eyesight and eye-hand coordination because most of their work is done at the drawing board; be able to function as part of a team since they work directly with engineers, architects, and skilled workers; and be able to do freehand drawings of three-dimensional objects. Artistic ability is helpful in some specialized fields.

High school graduates usually start out as tracers. Those having post-high school technical training usually qualify as junior drafters. After gaining experience, they may advance to checkers, detailers, senior drafters, or supervisors. Some may become independent designers. Courses in engineering and mathematics sometimes enable drafters to transfer to engineering positions.

Employment Outlook

Employment of drafters is expected to increase faster than the average for all occupations. This growth, along with the need to replace those who retire, die, or move into other fields of work, should provide favorable job opportunities through the mid-1980's. Holders of an associate (2-year) degree in drafting will have the best prospects. Many large employers already require post-secondary technical education, though well-qualified high school graduates who have studied drafting will find opportunities in some types of jobs.

Employment of drafters is expected to rise rapidly as a result of the increasingly complex design problems of modern products and processes. In addition, more drafters will be needed as supporting personnel for engineering and scientific occupations. Photoreproduction of drawings and expanding use of electronic drafting equipment and computers, however, will reduce the need for less skilled drafters.

Earnings

In private industry, beginning drafters earned between $560 and $740 a month in 1974; more experienced drafters earned from $700 to $900 a month. Senior drafters averaged roughly $1,000 a month, about one and one-half times as much as the average earnings of nonsupervisory workers in private industry, except farming.

The Federal Government paid drafters having an associate degree starting salaries of $7,596 a year in late 1974. Those with less education and experience generally started at $6,764. The average Federal Government salary for all drafters was $10,400 a year.

Sources of Additional Information

General information on careers for drafters is available from:

American Institute for Design and Drafting, 3119 Price Rd., Bartlesville, Okla. 74003.

International Federation of Professional and Technical Engineers, 1126 16th St. NW., Washington, D.C. 20036.

See Sources of Additional Information in the statement on Engineering and Science Technicians elsewhere in the *Handbook*.

From: U.S. Department of Labor. Bureau of Labor Statistics. *Occupational Outlook Handbook*, 1976-77 Edition. Bulletin 1875.

EXPLORING OCCUPATIONS WORKSHEET

Student's Name DREW LYONS Date MAY 13, 1977

Title of occupation to be explored ① DRAFTER

List the names of books or other materials used, or persons interviewed

OCCUPATIONAL OUTLOOK HANDBOOK

Job Requirements

What education and/or training is needed? HIGH SCHOOL OR POST HIGH SCHOOL (SUCH AS TECHNICAL OR VOCATIONAL SCHOOLS, COMMUNITY COLLEGES) WITH COURSES IN MATH, PHYSICAL SCIENCES, MECHANICAL DRAWING, AND DRAFTING.

List any special abilities needed (verbal, numerical, mechanical, etc.) HIGH ACCURACY, GOOD EYESIGHT, EYE-HAND COORDINATION, FREEHAND DRAWING, ABLE TO WORK AS PART OF A TEAM.

Do you need a license or special certificate to do this work? NO

List any other requirements for this occupation

Job Description

What are the duties? PREPARING DETAILED DRAWINGS BASED ON ROUGH SKETCHES, SPECIFICATIONS, & CALCULATIONS MADE BY ENGINEERS, ARCHITECTS, & DESIGNERS, CALCULATING THE STRENGH, QUALITY, QUANTITY, & COST OF MATERIALS. MAKING FINAL DRAWINGS WITH DETAILED VIEW OF OBJECT (SPECIFICATIONS TO BE FOLLOWED, PROCEDURES, OTHER INFO. NECESSARY TO CARRY OUT THE JOB.)

Check (✓) the kinds of interests that are related to this occupation. (This question may be omitted if the information is not available.)

☑ artistic	☑ computational	☐ literary	☐ outdoor	☐ persuasive
☐ clerical	☑ mechanical	☐ musical	☑ scientific	☐ social service

Check (✓) any special working conditions associated with this occupation.

☑ routine, unchanging work	☑ very little movement	☐ high pressure work
☐ work that changes a lot	☐ heavy physical work	☐ much travel
☐ work under supervision	☐ dangerous work	☑ all inside work
☐ work without supervision	☐ night or weekend work	☐ loud noise
☐ work mostly with others	☐ extreme heat or cold	
☐ work mostly alone	☐ get dirty or greasy	

Does the occupation have any other special working conditions? Describe them.

USING YOUR EYES TO DO DETAILED WORK.

What is the pay or pay range for this occupation? $560 - $1000 PER MONTH.

Job Future

What are the chances for advancement within this occupation? VERY GOOD. YOU CAN MOVE UP FROM A JUNIOR DRAFTER TO A CHECKER, TO A DETAILER, & EVENTUALLY TO A SENIOR DRAFTER.

What are the chances for staying employed in this occupation (employment outlook)?

GOOD. EMPLOYMENT OF DRAFTERS SHOULD INCREASE FASTER THAN THE AVERAGE OF ALL OCCUPATIONS. BEST OUTLOOK FOR THE A.A. DEGREE.

In Your Opinion . . .

What are the major advantages of this occupation? YOU CAN MOVE UP IN THIS OCCUPATION. FOUR YEARS OF COLLEGE ARE NOT NECESSARY.

What are the major disadvantages of this occupation? YOU MUST SIT ALL DAY BEHIND A DESK DOING CLOSE, DETAILED, ROUTINE WORK.

Turn the page to check your answers.

32

Check your work here.

EXPLORING OCCUPATIONS WORKSHEET

Student's Name DREW LYONS Date MAY 13, 1977

Title of occupation to be explored (1) DRAFTER

List the names of books or other materials used, or persons interviewed

OCCUPATIONAL OUTLOOK HANDBOOK

Job Requirements

What education and/or training is needed? (3) (4) HIGH SCHOOL OR POST HIGH SCHOOL (SUCH AS TECHNICAL OR VOCATIONAL SCHOOLS, COMMUNITY COLLEGES) WITH COURSES IN MATH, PHYSICAL SCIENCES, MECHANICAL DRAWING, AND DRAFTING.

(5) List any special abilities needed (verbal, numerical, mechanical, etc.) HIGH ACCURACY, GOOD EYESIGHT, EYE-HAND COORDINATION, FREEHAND DRAWING, ABLE TO WORK AS PART OF A TEAM.

Do you need a license or special certificate to do this work? NO

List any other requirements for this occupation

Job Description (2)

What are the duties? PREPARING DETAILED DRAWINGS BASED ON ROUGH SKETCHES, SPECIFICATIONS, & CALCULATIONS MADE BY ENGINEERS, ARCHITECTS, & DESIGNERS. CALCULATING THE STRENGTH, QUALITY, QUANTITY, & COST OF MATERIALS. MAKING FINAL DRAWINGS WITH DETAILED VIEW OF OBJECT (SPECIFICATIONS TO BE FOLLOWED, PROCEDURES, OTHER INFO. NECESSARY TO CARRY OUT THE JOB.)

Check (✓) the kinds of interests that are related to this occupation. (This question may be omitted if the information is not available.)

☑ artistic	☑ computational	☐ literary	☐ outdoor	☐ persuasive
☐ clerical	☑ mechanical	☐ musical	☑ scientific	☐ social service

Check (✓) any special working conditions associated with this occupation.

☑ routine, unchanging work	☑ very little movement	☐ high pressure work
☐ work that changes a lot	☐ heavy physical work	☐ much travel
(6) ☐ work under supervision	☐ dangerous work	☑ all inside work
☐ work without supervision	☐ night or weekend work	☐ loud noise
☐ work mostly with others	☐ extreme heat or cold	
☐ work mostly alone	☐ get dirty or greasy	

Does the occupation have any other special working conditions? Describe them.

(6) USING YOUR EYES TO DO DETAILED WORK.

What is the pay or pay range for this occupation? $560 - $1000 PER MONTH. (10)

Job Future

What are the chances for advancement within this occupation? (7) VERY GOOD. YOU CAN MOVE UP FROM A JUNIOR DRAFTER TO A CHECKER, TO A DETAILER, & EVENTUALLY TO A SENIOR DRAFTER.

What are the chances for staying employed in this occupation (employment outlook)? (8) (9) GOOD. EMPLOYMENT OF DRAFTERS SHOULD INCREASE FASTER THAN THE AVERAGE OF ALL OCCUPATIONS. BEST OUTLOOK FOR THE A.A. DEGREE.

In Your Opinion . . .

What are the major advantages of this occupation? YOU CAN MOVE UP IN THIS OCCUPATION. FOUR YEARS OF COLLEGE ARE NOT NECESSARY.

What are the major disadvantages of this occupation? YOU MUST SIT ALL DAY BEHIND A DESK DOING CLOSE, DETAILED, ROUTINE WORK.

Talking about Occupations

You can get some good, concrete facts about an occupation by reading the *Occupational Outlook Handbook*, the *Dictionary of Occupational Titles*, and *Project VIEW*. However, to get information about jobs you don't find listed, or to find out *more* about the job duties, employment opportunities, or salary in your state, you'll need to look elsewhere.

One of the best ways to find out more about a particular occupation is to talk with someone who does that kind of work or supervises workers in that area. These tips can help you set up and conduct a good interview with such a person.

1. Always be polite.
2. Telephone for an appointment. Make sure that it is a good time for the person you are interviewing.
3. Write down the questions you plan to ask and take them with you.
4. Introduce yourself.
5. Tell the person why you are interested in finding out about his/her occupation.
6. Take along a pad and pencil and write down the answers to each question you ask.
7. Thank the person.

After the interview, fill out an Exploring Occupations Worksheet on that occupation. (There are extra copies at the back of this booklet.) Use the notes you took at the interview to help you fill it out. Keep this worksheet and the other information you gather about occupations in one place. Then you'll have your own collection of information about the occupations you're interested in.